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| 09/670,722 | 09/28/2000 | Hideyuki Narusawa | Q60773 | 7046 |

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| EXAMINER | |
|---|---|
| PARK, CHAN S | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/670,722 | NARUSAWA ET AL. | |
| | Examiner | Art Unit | |
| | CHAN S PARK | 2622 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 September 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Drawings*

1. Figures 16, 17, and 18 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The disclosure is objected to because of the following informalities: insufficient description of "YUV system" in line 7, page 24 of the specification.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 6, 12, 13, 17, 18, 26-29, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Sekikawa U.S. Patent No. 6,498,658.

3. With respect to claim 1, the Sekikawa reference discloses a multifunction printer (digital copier in fig. 1) comprising:

A data acquiring device (card connector 118 or reading part 112) for acquiring original image data (col. 4, lines 49-54) and being recognizable as an independent device by a computer (control part 111) to which said data acquiring device is connected (the panel in fig. 13 shows that a memory card is distinctly independent from a scanner); and

A printing machine for printing print image data generated by image processing of said original image data and being recognizable as an independent device by a computer to which said printing machine is connected (col. 12, line 65 – col. 13, line10),

Said data acquiring device and said printing device being held in a common housing (fig. 1 & col. 3, lines 36-39). It should be noted that the digital copier includes scanner part 110 and printer part 120.

4. With respect to claim 5, the Sekikawa reference discloses the printer wherein said data acquiring device is a storage medium read-out device capable of removably setting a storage medium storing said original image data (removable memory card in col. 3, line 64), and said original image data is acquired by reading said storage medium (col. 4, lines 49-54).

5. With respect to claim 6, the Sekikawa reference discloses the printer wherein said data acquiring device is an optical image read-out device that optically reads paper representing an original image, and said original image data is acquired by optically reading paper representing said original image (col. 4, lines 8-10).

6. With respect to claim 12, the Sekikawa reference discloses a computer (control part 111) to which a multifunction printer (digital copier in fig. 1) holding a data acquiring device (card connector 118 or reading part 112) for acquiring image data and a printing device for printing the image data in a common housing (fig. 1 & col. 3, lines 36-39), and capable of recognizing said data acquiring device and said printing device independently (the panel in fig. 13 shows that the memory card and the scanner are distinctly independent), comprising:

A data acquiring device control section (control part 111) for controlling said data acquiring device and for acquiring original image data from said data acquiring device;

A print image data generating section (printer part 120) for acquiring and processing said original image data from said data acquiring device control section, and for generating print image data which said printing device can print; and

A printing device control section (controller 123) for controlling said printing device, then acquiring said print image data from said print image data generating section and transmitting said print image data to said printing device.

See the detailed description of fig. 1 in col. 3-5.

7. With respect to claim 13, the Sekikawa reference discloses the computer wherein said print image data generating section does not manage the number of said and other data acquiring devices, but said data acquiring device control section (control part 111) manages the number of said and other data acquiring devices connected thereto (col. 3, line 60 – col. 4, line 7), and

Wherein said printing device control section does not manage the number of said and other printing devices, but said print image data generating section manages the number of said and other printing devices (devices connected over the network 140) connected thereto (col. 4, lines 61-67).

8. With respect to claim 17, arguments analogous to those presented for claim 5, are applicable.

9. With respect to claim 18, arguments analogous to those presented for claim 6, are applicable.

10. With respect to claim 26, the claim 1 rejection based on the Sekikawa reference discloses all the limitations cited in claim 26 except a read/write storage medium device.

The Sekikawa reference further discloses that the digital copier has a capability of both reading the image data from the memory card and writing the captured image data to the memory card (col. 4, lines 46-49). Additionally, according to fig. 28, it further teaches the method of selecting output devices and writing image data captured from the scanner to the memory card (col. 20, lines 35-49). See figs. 13, 19, and 28.

With respect to the rest of claim 26, arguments analogous to those presented for claim 1, are applicable.

11. With respect to claim 27, the Sekikawa reference discloses the computer further comprising a switching section (the panel in conjunction with the control part 111) that switches said dual-use mode and said read-only mode in said storage medium read/write device control section (figs. 13, 19, and 28).

12. With respect to claim 28, the Sekikawa reference discloses the computer further comprising:

A storage medium loading information acquiring section that acquires, from said storage medium read/write device, storage medium loading information about whether said storage medium has been set or not (col. 18, lines 19-26); and

A prohibiting section that judges form said storage medium loading information whether said storage medium has been set or not, and prohibits a change between said dual-mode and said read-only mode in said switching section when said storage medium has been set (col. 18, lines 19-26).

It is inherent that when there is no memory card detected in the input part of the card connector, the control part 111 prohibits a change to the dual-mode since there is no reading means.

13. With respect to claim 29, arguments analogous to those presented for claim 1, are applicable.

14. With respect to claim 32, arguments analogous to those presented for claim 12, are applicable.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekikawa as applied to claim 1 above, and further in view of Silverbrook U.S. Patent No. 6,134,021.

15. With respect to claim 2, the Sekikawa reference discloses all the limitations of the multifunction printer as cited in claim 1.

Sekikawa does not disclose expressly that the printer is a color printer wherein said original image data is RGB-based data, and said print image data is YMC-based data.

Silverbrook, on the other hand, discloses a color copier including a memory card slot for storing input object image data (col. 3, line 61 – col. 4, line 12), a host computer, and a real-time processor for outputting the image data (col. 1, lines 37-45). It further discloses a color printer wherein said original image data is RGB-based data, and said print image data is YMC-based data (col. 7, lines 44-53).

Sekikawa and Silverbrook are analogous art because they are from the same field of endeavor, which is the printing art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the multifunction printer of Sekikawa with the color copier of Silverbrook.

The suggestion for doing so would have been to utilize the memory card for a color copier.

Therefore, it would have been obvious to combine Sekikawa with Silverbrook to obtain the invention as specified in claim 2.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekikawa as applied to claim 12 above, and further in view of Silverbrook.

16. With respect to claim 15, arguments analogous to those presented for claim 2, are applicable.

Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekikawa.

17. With respect to claim 3, the Sekikawa reference discloses all the limitations of the multifunction printer as cited in claim 1. It further discloses the method of compression/expansion processing of image data or dots (col. 4, lines 3-7 & col. 17, lines 36-37) wherein when the compression processing is performed, the number of values of said print image data is inherently less than that of said original image data.

The reference does not disclose expressly that said original image data is expressed by multi-value data representing a plurality of tones for each pixel, and said print image data is expressed by multi-value data for each pixel.

However, Examiner takes Official Notice that using multi-value data (binarization of image data in col. 4, line 6) representing plurality of tones or grey scale for each pixel

to express the original image data is commonly used and well known method in the printing art.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to express original image data by multi-value data representing a plurality of tones for each pixel in order to bring different grey scale level for each pixel to represent the image.

Therefore, it would have been obvious to obtain the invention as specified in claim 3.

18. With respect to claim 16, arguments analogous to those presented for claim 3, are applicable.

Claims 4 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekikawa as applied to claim 1 above, and further in view of Kato U.S. Patent No. 6,141,111.

19. With respect to claim 4, the Sekikawa reference discloses the printer wherein said data acquiring device holds data acquiring device identification information with which a computer distinguishes said data acquiring device from any other data acquiring device (figs. 20A-G & fig. 3A shows the method of distinguishing the data acquiring device), and transmits said data acquiring device identification information to said computer (control part 111) in response to a request therefrom (col. 3, line 60 – col. 4, line 7). It further discloses that the copier can be connected to and communicate with other personal computers through network (col. 5, lines 40-42).

The reference does not disclose expressly that the printing device holds printing device identification information with which a computer distinguishes said printing device from any other printing device, and transmits said printing device identification information to said computer in response to a request therefrom.

The Kato reference, on the other hand, discloses the printing device that receives image data from an acquiring device (communication interface 9 in fig. 1 and PC card memory in col. 7, line 41) and a printer (4) for printing the received image data wherein the data acquiring device and the printer being held in a common housing (fig. 1). The reference further discloses the printing device that holds printing device identification information (network address) with which a computer distinguishes said printing device from any other printing device, and transmits said printing device identification information to said computer in response to a request therefrom (figs. 3A-D & 10).

Sekikawa and Kato are analogous art because they are from the same field of endeavor, which is the printing art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the multifunction printer of Sekikawa with the plurality of network color copier/printer system of Kato.

The suggestion for doing so would have been to distinguish between the network printers and to transfer data to the designated printer using the network address (col. 4, lines 36-43 of Kato).

Therefore, it would have been obvious to combine Sekikawa with Kato to obtain the invention as specified in claim 4.

20. With respect to claim 7, the Kato reference discloses the printer wherein said data acquiring device and said printing device hold identification information indicating that said data acquiring device (scanner) and said printing device (printer) are held in a common housing.

It is commonly known that a copier has a scanning means and a printing means whereas a conventional ink-jet printer has only printing means. According to fig. 10 of Kato, it clearly teaches the method of distinguishing between different printing devices. Therefore, it is inherent for the user to know when the printer type is found to be a digital copier then both the acquiring device and the printing device are held in a common housing, whereas when the printer type is found to be a ink-jet printer then the two devices are not in a common housing.

Furthermore, the Sekikawa reference discloses a panel for displaying all the available data acquiring devices and the output devices (fig. 13). Therefore, it indicates that said data acquiring device and said printing device are held in a common housing.

21. With respect to claim 8, the Kato reference discloses the printer wherein said data acquiring device and said printing device held in a common housing hold a common serial number used as said identification information (network address in col. 4, lines 36-43).

According to fig. 3C, image printer A, which includes both a printer and a scanner according to fig. 1, has one network address.

22. With respect to claim 9, the Kato reference discloses the printer wherein said data acquiring device and said printing device transmit said identification information to

a computer (CPU 1 in conjunction with control panel 6) in response to a request therefrom (CPU 1 in conjunction with control panel 6 in col. 3, lines 42-45 and fig. 2).

23. With respect to claim 10, the Sekikawa reference discloses the printer wherein said data acquiring device is a storage medium read-out device capable of removably setting a storage medium storing said original image data (removable memory card in col. 3, line 64), and said original image data is acquired by reading said storage medium (col. 4, lines 49-54).

24. With respect to claim 11, the Sekikawa reference discloses the printer wherein said data acquiring device is an optical image read-out device that optically reads paper representing an original image, and said original image data is acquired by optically reading paper representing said original image (col. 4, lines 8-10).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekikawa as applied to claim 12 above, and further in view of Kato.

25. With respect to claim 14, arguments analogous to those presented for claim 4, are applicable.

Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekikawa as applied to claim 29 above, and further in view of Kato.

26. With respect to claim 30, arguments analogous to those presented for claim 7, are applicable.

27. With respect to claim 31, arguments analogous to those presented for claim 8, are applicable.

Claims 19-25 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato in view of Sekikawa.

28. With respect to claim 19, the Kato reference discloses a computer (CPU 1 or CPU 12 in fig. 1) to which a multifunction printer (image printer 26) is connected, said multifunction printer holding a data acquiring device (communication interface A 9 or scanner 3) for acquiring image data and a printing device for printing the image data in a common housing, said multifunction printer holding identification information indicating that said data acquiring device and said printing device are held in a common housing, said computer being capable of recognizing said data acquiring device and said printing device independently (refer to the second paragraph of claim 7 rejection and the last paragraph of current claim rejection), comprising:

A data acquiring device identification information acquiring section that acquires, from said data acquiring device, data acquiring identification information enabling distinction of said data acquiring device from other such data acquiring devices (the panel in fig. 13 shows that the memory card and the scanner are distinctly detected);

A printing machine identification information acquiring section that acquires, from said printing machine, printing device identification information enabling distinction of said printing device from other such printing devices (network address in col. 4, lines 36-43); and

It is commonly known that a copier has a scanning means and a printing means whereas a conventional ink-jet printer has only printing means. According to fig. 10 of Kato, it clearly teaches the method of distinguishing between different printing devices. Therefore, it is inherent for the user to know when the printer type is found to be a digital copier then both the acquiring device and the printing device are held in a common housing, whereas when the printer type is found to be a ink-jet printer then the two devices are not in a common housing.

The Kato reference, however, does not disclose expressly a comparing section that compares said data acquiring device identification information with said printing device identification information to judge whether said both devices are held in a common housing or not.

The Sekikawa reference, on the other hand, discloses a panel for displaying all the available data acquiring devices and the output devices held in a common housing (fig. 13). Therefore, it compares all the data acquiring devices and indicates that said data acquiring device and said printing device are held in a common housing.

As noted above in claim 4, Sekikawa and Kato are analogous art because they are from the same field of endeavor, which is the printing art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the plurality of network color copier/printer system of Kato with the method of displaying the data acquiring devices on the panel of Sekikawa.

The suggestion for doing so would have been to distinguish all the available data acquiring devices and give the user an option to select an appropriate acquiring device for a particular print job.

Therefore, it would have been obvious to combine Sekikawa with Kato to obtain the invention as specified in claim 19.

29. With respect to claims 20 and 21, the Kato reference discloses the computer further comprising notifying sections that gives a notice to a user when said data acquiring device and said printing device are or are not held in a common housing.

Again, as noted in above in the claim 19 rejection, it is commonly known that a copier has a scanning means and a printing means whereas a conventional ink-jet printer has only printing means. According to fig. 10 of Kato, it clearly teaches the method of distinguishing between different printing devices. Therefore, it is inherent for the user to know when the printer type is found to be a digital copier then both the acquiring device and the printing device are held in a common housing, whereas when the printer type is found to be a ink-jet printer then the two devices are not in a common housing.

Furthermore, the Sekikawa reference discloses a panel for displaying all the available data acquiring devices and the output devices (fig. 13). Therefore, it indicates that said data acquiring device and said printing device are held in a common housing.

30. With respect to claim 22, the Sekikawa reference discloses the computer further comprising a selection section that enables a user to select said printing device for

printing said image data even when said data acquiring device and said printing device are not held in a common housing.

Again, referring to fig. 18, the user is given a selection section (panel 17) for selecting the output device even if the input device, the memory card, is not present.

31. With respect to claim 23, the Kato reference discloses the computer wherein said data acquiring device is a storage medium read-out device capable of removably setting a storage medium storing said original image data (PC card in col. 7, line 41-42), and said original image data is acquired by reading said storage medium (col. 7, line 40).

Also, arguments analogous to those presented for claim 5, are applicable.

32. With respect to claim 24, the Sekikawa reference discloses the computer further comprising:

A storage medium loading information acquiring section (control part 111) that acquires, from said storage medium read-out device, storage medium loading information about whether said storage medium has been set or not; and

A third notifying section (panel in fig. 13) that judges from said storage medium loading information whether said storage medium has been set or not, and gives a notice to a user when said storage medium has not been set.

Again, the Sekikawa reference discloses a panel for displaying all the available data acquiring devices and the output devices (fig. 13). When no memory card is detected, it does not display a memory card in the panel as shown in fig. 7. Thus, the panel inherently notifies the user when said storage medium has not been set.

33. With respect to claim 25, the Kato reference discloses the computer wherein said data acquiring device is an image read-out device that reads paper representing an original image, and said original image data is acquiring by reading paper representing said original image (scanner 3 & col. 11, line 3). Additionally, it is inherent that the scanner in the digital copier is equipped with an optical sensor for reading the image and converting it to image data.

Also, arguments analogous to those presented for claim 6, are applicable.

34. With respect to claim 33, arguments analogous to those presented for claim 19, are applicable.

***Conclusion***

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S PARK whose telephone number is (703) 305-2448. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Chan S. Park
January 21, 2004

EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CE